

# B R E V I O R A

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### A NEW SPECIES OF AGRIOGNATHA FROM JAMAICA, B. W. I.

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In connection with my study of the genus *Tetragnatha* Latreille, 1804 from Panama I have also had the opportunity to study several species believed to belong to the rather poorly-known genus *Agriognatha* O. P. Cambridge, 1896. Apparently there is at least one species in Panama not included among those recognized by F. P. Cambridge in 1903 and not described by any later author. It is expected that a description of this new species will be published shortly.

For some time prior to her death in 1953, Miss E. B. Bryant of the Museum of Comparative Zoology at Harvard College had been engaged in a study of a fairly representative collection of spiders from Jamaica, B. W. I. This collection had come from several sources but it had been assembled largely through the interest of Mr. C. Bernard Lewis, Curator of the Science Museum, Institute of Jamaica, Kingston, Jamaica. The collection is now in my possession and it is hoped that considerable time can be devoted to its study during the next few years.

Among the new Tetragnathinae selected by Miss Bryant for description was the species here described in accord with my usual procedure. I have thought it appropriate to name the species in honor of Miss Bryant who for many years gave unstintingly of her time and energy to the care of the large collection of spiders in the Museum of Comparative Zoology at Harvard College. So far as I know, this is the only species of *Agriognatha* reported from the island of Jamaica.

The holotype and allotype will be deposited in the collection of the Museum of Comparative Zoology at Harvard College.

Genus *AGRIOGNATHA* O. P. Cambridge, 1896

The genus *Agriognatha* O. P. Cambridge, 1896 was based upon a male from Costa Rica. In 1897 Simon described a species from St. Vincent as *Cyrtognatha serrata*, apparently following Keyserling who established the genus *Cyrtognatha* in 1881. F. P. Cambridge had Simon's *C. serrata* for study and regarded it as congeneric with *A. bella* (O. P. Cambridge) from Costa Rica. He considered it probable that *Cyrtognatha* Keyserling was the same as *Agriognatha* O. P. Cambridge. He also noted that the name *Cyrtognatha* was preoccupied and he placed all species regarded by the authors as belonging to either genus in the genus *Agriognatha* although he had doubts regarding the proper position of *A. lepida* (O. P. Cambridge). Petrunkevitch (1911) placed all five species then known in the genus *Cyrtognatha*. Roewer (1942) has retained this practice. I have not seen *Cyrtognatha globosa* Petrunkevitch, described from a female taken in the San Lorenzo River region of Panama but it seems unlikely that this species belongs in the genus *Agriognatha* as the latter is now understood. It now seems to the author of this paper that the two genera under consideration here are distinct but that all species recognized by Miss E. B. Bryant (1940, 1945) from Cuba and Hispaniola can safely be placed in the genus *Agriognatha*. This also seems certain for the species from Jamaica described in this paper.

*AGRIOGNATHA BRYANTAE* SP. NOV.

(Figures 1-5)

*Male holotype.* Total length 3.965 mm. (chelicerae not extended anterior to head region). Carapace 1.745 mm. long, 1.30 mm. wide opposite second coxae where it is widest; rather sharply narrowed opposite first coxae; median thoracic pit rather shallow and broad (considerably different from that seen in specimens from Panama).

*Eyes.* Eight in two rows as usual in the genus; LE extend slightly beyond border of head. Viewed from above, anterior

row strongly recurved, posterior row moderately recurved; viewed from in front, anterior row moderately recurved, posterior row slightly procurved, both measured by centers; central ocular quadrangle wider in front than behind in ratio of 9 : 8, as wide in front as long. Ratio of eyes AME : ALE : PME : PLE = 9 : 8.5 : 8.5 : 7. AME separated from one another by 11/9 of their diameter, from ALE by 5/3 of their diameter. PME separated from one another by nearly three fourths of their diameter, from PLE by about 7/4 of their diameter. Laterals separated from one another by a little less than the radius of PLE. Lateral eyes on a moderately prominent tubercle. Height of clypeus equal to diameter of AME.

*Chelicerae.* Very divergent, nearly horizontal; in place of the basal boss there is a prominent tubercle from which a ridge extends nearly to the base of the fang; basal segment of each chelicera 1.235 mm. long and, therefore, nearly two thirds as long as carapace. Fang long, slender, somewhat sinuous, and with a prominent cusp on the inner surface just proximal to the middle. The fang groove has a robust non-bifurcate tooth near the base of the fang on the promargin together with three small teeth; the retromargin has four small teeth as shown in Figure 1.

*Maxillae.* Essentially parallel but with distal third slightly curved outward and considerably widened; slightly more than twice as long as lip.

*Lip.* Considerably wider at base than long; sternal suture gently procurved; sternal tubercles prominent at ends of sternal suture.

*Sternum.* Cordiform; moderately convex; slightly longer than wide between second coxae where it is widest; moderately extended between all coxae; terminates in a blunt point between bases of fourth coxae which are separated by slightly more than one third of their width.

*Legs.* 1243. Width of first patella at "knee" .220 mm., tibial index of first leg 5. Width of fourth patella at "knee" .165 mm., tibial index of fourth leg 7.

|                                   | Femora | Patellae | Tibiae | Metatarsi | Tarsi | Totals |
|-----------------------------------|--------|----------|--------|-----------|-------|--------|
| (All measurements in millimeters) |        |          |        |           |       |        |
| 1.                                | 3.770  | .810     | 3.770  | 4.192     | 1.365 | 13.907 |
| 2.                                | 2.990  | .745     | 2.600  | 2.900     | 1.105 | 10.340 |
| 3.                                | 1.560  | .390     | .910   | 1.170     | .640  | 4.670  |
| 4.                                | 2.210  | .455     | 1.820  | 2.210     | .780  | 7.475  |
| Palp                              | .726   | .185     | .198   | —         | .682  | 1.791  |

Many true spines as well as hairs on all legs. It is considered unnecessary to record all spines, hence, only those which seem to be more or less distinctive are emphasized here. First leg: there is a row of four short but fairly robust ventral spines near the base of the femur together with a row of seven very short but fairly robust retrolateral spines extending through the proximal two thirds of the segment and also a long robust retrolateral spine near the distal end of this segment; the patella has the characteristic retrolateral chitinous ridge; the metatarsus has a row of about 25 short ventral robust spines extending nearly throughout the length of the segment. The second leg is essentially like the first in respect to the characteristics noted with the specialized robust retrolateral spine near the distal end of the femur arising from a raised base. The expected prolateral trichobothria on both third and fourth femora are present but are much less conspicuous than in the Central American species thus far observed.

*Palp.* Complicated; somewhat difficult to describe because of numerous associated apophyses. The paracymbium appears to have a somewhat characteristic terminal enlargement. Near the tip of the cymbium there is a small pit, regarded as a type of sense organ. The same type of presumed sense organ has been noted on related genera and species. See Figures 2 and 3 for details of palpal structure.

*Abdomen.* Unnotched at anterior end which is bluntly rounded; 2.34 mm. long; 1.06 mm. wide near middle; with spiracle near base of spinnerets; with a well defined colulus, oval in outline; with genital fold (Fig. 5) only slightly posterior to openings of book lungs.

*Color in alcohol.* Chelicerae brown; legs yellowish brown with many irregular darker areas especially on dorsal surfaces. Carapace: with a narrow brown marginal stripe from opposite

PE to opposite third coxae where it becomes a wide stripe which continues to posterior border; also with an irregular broad median dark stripe from PME to median thoracic pit. Abdomen: a broad serrated median dark gray stripe extends from base to spinnerets; on each side of this there is an irregular light stripe with scattered silvery spangles; the lateral sides are dark gray with oblique extensions dorsally; the venter is yellowish with a row of small silvery spangles on each side.

*Female allotype.* Total length 4.94 mm.; including the chelicerae 5.46 mm. Carapace 1.95 mm. long, 1.43 mm. wide opposite interval between second and third coxae where it is widest; other features essentially as in male.

*Eyes.* Central ocular quadrangle about as wide in front as long. Ratio of eyes AME : ALE : PME : PLE = 9 : 10 : 9 : 8. AME separated from one another by 10/9 of their diameter, from ALE by slightly less than twice their diameter. PME separated from one another by 10/9 of their diameter, from PLE by twice their diameter. Laterals separated from one another by about  $\frac{1}{4}$  of the diameter of ALE. Height of clypeus equal to slightly more than  $\frac{2}{3}$  of the diameter of AME. Other features essentially as in male.

*Chelicerae.* Robust; only slightly divergent and porrect; basal segment 1.04 mm. long; fang regularly curved and without special features; promargin of fang groove well marked, with three teeth; retromargin of fang groove with four teeth (Fig. 4); some variation in placement and relative sizes of the teeth has been noted and must be expected among paratypes.

*Maxillae, Lip, and Sternum.* Essentially as recorded for the male.

*Legs.* 1243. Width of first patella at "knee" .264 mm., tibial index of first leg 7. Width of fourth patella at "knee" .198 mm., tibial index of fourth leg 10.

|                                   | Femora | Patellae | Tibiae | Metatarsi | Tarsi | Totals |
|-----------------------------------|--------|----------|--------|-----------|-------|--------|
| (All measurements in millimeters) |        |          |        |           |       |        |
| 1.                                | 3.380  | .845     | 3.140  | 3.412     | 1.365 | 12.142 |
| 2.                                | 2.600  | .780     | 2.190  | 2.632     | 1.040 | 9.242  |
| 3.                                | 1.495  | .435     | .845   | .975      | .715  | 4.465  |
| 4.                                | 2.210  | .487     | 1.495  | 1.820     | .780  | 6.792  |

All legs with stout spines and hairs but the spines seem not to be specialized as in the male. The trichobothria on the third and fourth femora essentially as recorded for the male.

*Abdomen.* Very gibbous dorsally just behind the middle but this swelling seems to be completely lacking in some female paratypes; 3.575 mm. long; 2.080 mm. wide opposite the gibbosity where it is widest; genital groove as shown in Figure 5.

*Color in alcohol.* Chelicerae much lighter than in male with mottled gray markings in front in basal half. Otherwise essentially as in male.

*Type locality.* Male holotype and female allotype from Hardwar Gap, Jamaica, B. W. I., June 27, 1954. Several paratypes of both sexes from the following localities: Blue Mountains, August, 1934 (Darlington); St. Andrews, Clydesdale, July, 1950 (Bengry); Hardwar Gap, June, 1954<sup>1</sup>; Hanover, Askenish, trail to Dolphin's Head, June 24, 1954.

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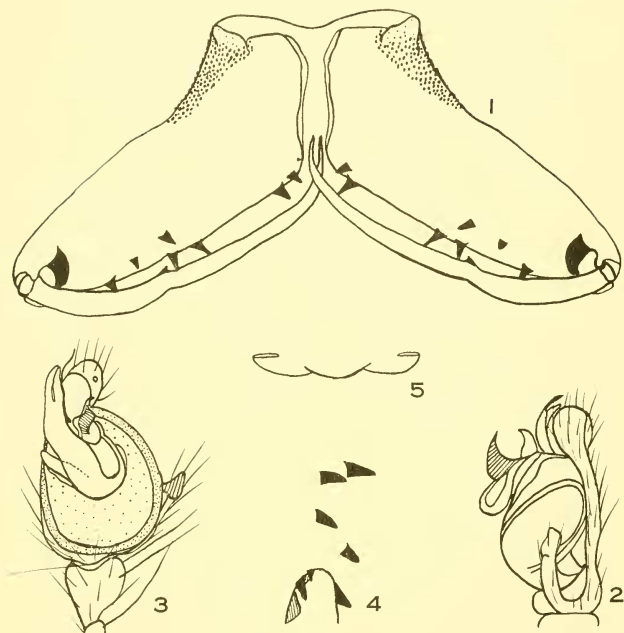
<sup>1</sup>Since the completion of this paper two females and one adult male believed to belong to this species have been collected at Hardwar Gap, Jamaica, in July, 1955, by Dr. Allan F. Archer who has kindly loaned these specimens for examination.

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External Anatomy of *Agriognatha bryantae* sp. nov.

Fig. 1. Male chelicerae, from in front.

Figs. 2-3. Tarsus of male palp; lateral and ventral views.

Fig. 4. Female cheliceral teeth.

Fig. 5. Genital furrow of the female.